(d) Remarks:

The claims are 16, 17 and 19-21, with claim 16 being independent. Claims 16 and 17 have been amended to better define the intended invention. Reconsideration of the claims is requested.

Support for the Amendment to claim 16 is found, inter alia, in Example 7, page 21, line 24 and page 8, lines 1-4.

As requested, a replacement sheet is provided for Figs. 9A-9B in which a "PRIOR ART" legend is added.

Claims 16-21 were rejected under 35 U.S.C. 112, first paragraph as lacking written description. The Examiner argues applicants never disclose excluding the step of etching after anodization in Example 7. That objection is respectfully traversed.

In Example 7, page 22, lines 22-25 it is disclosed that the aluminum nano-holes are formed by anodization perpendicularly in a high aspect ratio, which cannot be attained by usual photolithography or etching. (emphasis supplied). Thus, written description exists for excluding etching to remove residual film after anodization. In addition, Examples 1-6 use a patterning layer of PMMA or silsesquioxane, not aluminum alkoxide. With such patterning layers of Examples 1-6, etching can be employed. However, when using aluminum alkoxide, no etching is required, as shown in Example 7. The aluminum in the aluminum alkoxide is dissolved during anodization and no residual film is present. However PMMA is not dissolved completely during anodization and a residual film is present which needs etching. See page 22, lines 16-18.

Further, the disclosure of "wet etching" with phosphoric acid on page 22, line 26 to page 23, line 2, relates to enlarging the nano-hole, and not to removing any remaining film. This teaching is also found in col. 15 of U.S.P 6, 278, 231.

Claims 16-21 were rejected in the outstanding office action as obvious over Chou '580 in view of Tamayoshi '785. The Examiner admits Chou '580 explicitly fails to disclose anodizing the substrate by immersion in an anodization solution or that the substrate is of a material soluble during anodization. Tamayoshi '785 is said to disclose that which is missing in Chou. The Examiner notes that the claims do not explicitly recite that it is not necessary to remove the remaining film existing in the depression of the patterning layer by a separate etching step nor do the claims exclude a separate etching step. The rejection is respectfully traversed.

Prior to addressing the rejection applicants wish to briefly review certain key features and advantages of the present claimed invention. The present invention employs a patterning layer of aluminum alkoxide in which holes are formed when dissolved by the anodization solution. In the present invention, it is not necessary to remove the remaining film existing in the depression of the patterning layer by a separate step as by etching, which feature simplifies the process of hole formation. See Example 7. The anodization dissolves any aluminum.

Chou teaches use of a reactive ion etching or chemical etching to form recesses in the substrate. The present invention avoids a separate etching step to form holes.

Tamayoshi merely discloses forming holes by anodization. However, Tamayoshi fails to disclose using a patterning layer comprised of aluminum alkoxide which is a soluble material to reduce the steps in forming holes.

It would have not been obvious for those skilled in the art to combine Chou having no specific disclosure of forming holes by anodization, but employing etching, with Tamayoshi, directed to a technique of forming holes by anodization.

Even when combined, the concept of using a patterning layer of an aluminum alkoxide, a soluble material, to reduce the steps, such as etching, would be unappreciated.

The claims should be allowed and the case passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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